

This Page Is Inserted by IFW Operations
and is not a part of the Official Record

BEST AVAILABLE IMAGES

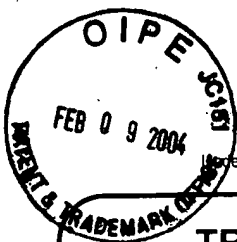
Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

**As rescanning documents *will not* correct images,
please do not report the images to the
Image Problem Mailbox.**



PTO/SB/21 (08-03)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

**TRANSMITTAL
FORM**

(to be used for all correspondence after initial filing)

TRANSMITTAL FORM (to be used for all correspondence after initial filing)	Application Number	10/676,576	
	Filing Date	September 30, 2003	
	First Named Inventor	Haitao WU	
	Art Unit	2155	
	Examiner Name	Unknown	
Total Number of Pages in This Submission	N/A	Attorney Docket Number	59864.00098 (NC31519US)

ENCLOSURES (check all that apply)

<input checked="" type="checkbox"/> Fee Transmittal Form (in duplicate) <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment / Reply <input type="checkbox"/> After Final <input type="checkbox"/> with RCE <input type="checkbox"/> Extension of Time Request (in duplicate) <input checked="" type="checkbox"/> Return Postcard <input checked="" type="checkbox"/> Information Disclosure Statement (2 pages) <input checked="" type="checkbox"/> PTO Form 1449 (2 pages) (original and one copy to be initialed by the Examiner and returned to us) <input type="checkbox"/> Response to Missing Parts/ Incomplete Application <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____	<input type="checkbox"/> After Allowance Communication to Group <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Request for Status of Application <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): 21 References		
<table border="1"><tr><td>Remarks</td><td></td></tr></table>			Remarks	
Remarks				

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

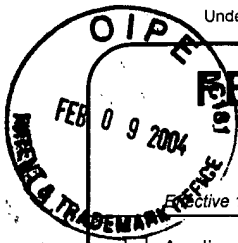
Firm or Individual name	Aaron Wininger, Reg. No. 45,229 Squire, Sanders & Dempsey L.L.P. 600 Hansen Way Palo Alto, CA 94304-1043
Signature	
Date	February 5, 2004

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below.

Typed or printed name	Aaron Wininger		
Signature		Date	February 5, 2004

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.



Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

FREE TRANSMITTAL for FY 2004

Effective 10/01/2003. Patent fees are subject to annual revision.

☐ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$) 0

Complete if Known

Application Number	10/676,576
Filing Date	September 30, 2003
First Named Inventor	Haitao WU
Examiner Name	Unknown
Art Unit	2155
Attorney Docket No.	59864.00098 (NC31519US)

METHOD OF PAYMENT (check all that apply)

☐ Check ☐ Credit card ☐ Money ☐ Other ☐ None
Order

☒ Deposit Account:

Deposit
Account
Number

05-0150

Deposit
Account
Name

Squire, Sanders & Dempsey L.L.P.

The Director is authorized to: (check all that apply)

☐ Charge fee(s) indicated below ☒ Credit any overpayments
☒ Charge any additional fee(s) during the pendency of this application
☐ Charge fee(s) indicated below, except for the filing fee
to the above-identified deposit account.

FEE CALCULATION

1. BASIC FILING FEE

Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code	Fee (\$)	Fee Code	Fee (\$)		
1001	770	2001	385	Utility filing fee	
1002	340	2002	170	Design filing fee	
1003	530	2003	265	Plant filing fee	
1004	770	2004	385	Reissue filing fee	
1005	160	2005	80	Provisional filing fee	

SUBTOTAL (1)

(\$) 0

2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

Total Claims		** =	Extra Claims	X	Fee from below	=	Fee Paid
Independent Claims		** =	0	X		=	0
Multiple Dependent				X		=	0

Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code	Fee (\$)	Fee Code	Fee (\$)		
1202	18	2202	9	Claims in excess of 20	
1201	86	2201	43	Independent claims in excess of 3	
1203	290	2203	145	Multiple dependent claim, if not paid	
1204	86	2204	43	** Reissue independent claims over original patent	
1205	18	2205	9	** Reissue claims in excess of 20 and over original patent	

SUBTOTAL (2)

(\$) 0

**or number previously paid, if greater; For Reissues, see above

FEE CALCULATION (continued)

3. ADDITIONAL FEES

Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code	Fee (\$)	Fee Code	Fee (\$)		
1051	130	2051	65	Surcharge - late filing fee or oath	
1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet.	
1053	130	1053	130	Non-English specification	
1812	2,520	1812	2,520	For filing a request for reexamination	
1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action	
1805	1,840*	1805	1,840*	Requesting publication of SIR after Examiner action	
1251	110	2251	55	Extension for reply within first month	
1252	420	2252	210	Extension for reply within second month	
1253	950	2253	475	Extension for reply within third month	
1254	1,480	2254	740	Extension for reply within fourth month	
1255	2,010	2255	1,005	Extension for reply within fifth month	
1401	330	2401	165	Notice of Appeal	
1402	330	2402	165	Filing a brief in support of an appeal	
1403	290	2403	145	Request for oral hearing	
1451	1,510	1451	1,510	Petition to institute a public use proceeding	
1452	110	2452	55	Petition to revive - unavoidable	
1453	1,330	2453	665	Petition to revive - unintentional	
1501	1,330	2501	665	Utility issue fee (or reissue)	
1502	480	2502	240	Design issue fee	
1503	640	2503	320	Plant issue fee	
1460	130	1460	130	Petitions to the Commissioner	
1807	50	1807	50	Processing fee under 37 CFR 1.17 (q)	
1806	180	1806	180	Submission of Information Disclosure Stmt	
8021	40	8021	40	Recording each patent assignment per property (times number of properties)	
1809	770	2809	385	Filing a submission after final rejection (37 CFR § 1.129(a))	
1810	770	2810	385	For each additional invention to be examined (37 CFR § 1.129(b))	
1801	770	2801	385	Request for Continued Examination (RCE)	
1802	900	1802	900	Request for expedited examination of a design application	

Other fee (specify) _____

*Reduced by Basic Filing Fee Paid

SUBTOTAL (3)

(\$) 0

SUBMITTED BY

Complete (if applicable)

Name (Print/Type)	Aaron Wininger	Registration No. (Attorney/Agent)	45,229	Telephone	650.856.6500
Signature				Date	February 5, 2004

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing this form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.



PATENT
Attorney Docket No.: 59864.00098 (NC31519US)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

CERTIFICATE OF MAILING

I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on

Date: 2/5/04

By: [Signature]
Aaron Winger

In re Application of:	
Haitao WU, et al.	Examiner: Unknown
Serial No.: 10/676,576	Art Unit: 2155
Filed: September 30, 2003	
Title: TCP-FRIENDLY MARKERS AND METHODS USING TOKEN BUCKETS	

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

**SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT
PURSUANT TO 37 CFR §1.97(b)**

Sir:

In accordance with the duty of disclosure under 37 CFR §1.56 and pursuant to 37 CFR §§1.97-1.98, Applicants hereby notify the U.S. Patent and Trademark Office of the references listed on the enclosed Form PTO-1449. Enclosed please find copies of the references for your convenience.

The present Supplemental Information Disclosure Statement is being filed more than three months after the filing date but before receiving the first Office Action. Accordingly, no fee or certification is needed.

The submission of the listed documents is not intended as an admission that any such document constitutes prior art against the claims of the present application. Applicants reserve

the right to dispute any of the listed documents as prior art during examination. Furthermore, Applicants do not waive any right to take any action that would be appropriate to antedate or otherwise remove any listed document as a competent reference against the claims of the present application. The submission of this Supplemental Information Disclosure Statement is not to be construed as a representation that a search has been made or that no other material information may exist.


The Examiner is requested to initial the enclosed Form PTO-1449 and return a copy thereof to the undersigned.

If for any reason an insufficient fee has been paid, please charge the insufficiency to Deposit Account No. 05-0150.

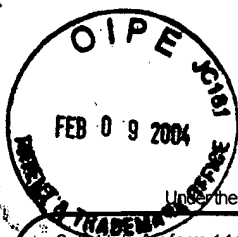
Date: 2/5/04

Respectfully submitted,

Squire, Sanders & Dempsey L.L.P.
600 Hansen Way
Palo Alto, CA 94304-1043
Telephone (650) 856-6500
Facsimile (650) 843-8777



Aaron Wininger
Attorney for Applicants
Reg. No. 45,229



PTO/SB/08b(08-03)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449B/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet

1

of

2

Complete if Known

Application Number	10/676,576
Filing Date	September 30, 2003
First Named Inventor	Haitao Wu
Art Unit	2155
Examiner Name	Unknown
Attorney Docket Number	59864.00098 (NC31519US)

NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		BLAKE, S. et al.; "An Architecture for Differentiated Services"; Network Working Group; RFC 2475; December 1998; 34 pages. URL: http://www.ietf.org/rfc/rfc2475.txt?number=2475 .	
		NICHOLS, K. et al.; "Definition of the Differentiated Services Field (DS Field) in the IPv4 and IPv6 Headers"; Network Working Group; RFC 2474; December 1998; 19 pages. URL: http://www.ietf.org/rfc/rfc2474.txt?number=2474 .	
		FENG, Wu-Chang et al.; "Adaptive Packet Marking for Providing Differentiated Services in the Internet"; date unknown; 10 pages.	
		NANDY, B. et al.; "Intelligent Traffic Conditioners for Assured Forwarding Based on Differentiated Services Networks"; High Performance Networking 2000 Conference, Paris, France; May 2000; 16 pages.	
		AZEEM, Feroz et al. "TCP-Friendly Traffic Conditioners for Differentiated Services"; Department of ECSE, Rensselaer Polytechnic Institute, Troy, NY; 1999; pages 1-13.	
		IBANEZ, J et al.; "Preliminary Simulation Evaluation of an Assured Service"; Internet Draft; Internet Engineering Task Force; August 1998; pages 1-19; <draft-ibanez-diffserv-assured-eval-00.txt>.	
		CLARK, David D. et al.; "Explicit Allocation of Best-Effort Packet Delivery Service"; IEEE/ACM Transactions of Networking; August 1998; pages 362-373; Vol. 6, No. 4; Copyright 1998 IEEE.	
		HEINANEN, J et al.; "A two Rate Three Color Marker"; Network Working Group; RFC2698; September 1999; 5 pages. URL: http://www.ietf.org/rfc/rfc2698.txt?number=2698 .	
		HEINANEN, J. et al.; "A Single Rate Three Color Marker"; Network Working Group; RFC 2697; September 1999; 6 pages. URL: http://www.ietf.org/rfc/rfc2697.txt?number=2697 .	
		JACOBSON, V. et al.; "An Expedited Forwarding PHB"; Network Working Group; RFC 2598; June 1999; 11 pages. URL: http://www.ietf.org/rfc/rfc2598.txt?number=2598 .	
		HEINANEN, J. et al.; "Assured Forwarding PHB Group"; Network Working Group; RFC 2597; June 1999; 11 pages. URL: http://www.ietf.org/rfc/rfc2597.txt?number=2597 .	
		BERNET, Y. et al.; "A Framework for Differentiated Services"; IETF Internet Draft; February 1999; pages 1-35; <draft-ietf-diffserv-framework-02.txt>.	
		FEROZ, Azeem, et al.; "A TCP-Friendly Traffic Marker for IP Differentiated Services"; Department of ECSE, Rensselaer Polytechnic Institute, Troy, NY; 1999; 19 pages.	
		HEINANEN, Juha, et al.; "A Three Color Marker"; Internet Draft; Internet Engineering Task Force; February 1999; pages 1-4; <draft-heinane-diffserv-tcm-01.txt>.	

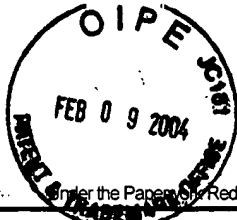
Examiner
SignatureDate
Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



PTO/SB/08b(08-03)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449B/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet 2 of 2

Complete if Known

Application Number	10/676,576
Filing Date	September 30, 2003
First Named Inventor	Haitao Wu
Art Unit	2155
Examiner Name	Unknown
Attorney Docket Number	59864.00098 (NC31519US)

NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		FALL, Kevin et al.; "Simulation-based Comparisons of Tahoe, Reno, and SACK TCP"; Lawrence Berkeley National Laboratory; CCR; Vol. 26, No. 3; July 1996; 17 pages.	
		FLOYD, Sally et al.; "Random Early Detection Gateways for Congestion Avoidance"; Lawrence Berkeley Laboratory; IEEE/ACM Transactions on Networking, Vol. 1, No. 4; August 1993; 32 pages.	
		BAGAL, Prasad et al.; "Comparative study of RED, ECN and TCP Rate Control"; Technical Report; March 1999; 27 pages. URL: http://www.ecse.rpi.edu/Homeworks/shivkuma/research/papers-rpi.html .	
		FANG, W. et al.; "A Time Sliding Window Three Colour Marker (TSWTCM)"; Network Working Group; RFC 2859; June 2000; 9 pages.	
		SAHU; Sambit et al.; "On Achievable Service Differentiation with Token Bucket Marking for TCP"; UMASS CMPSCI TECH REPORT; Copyright 2000 ACM; pages 23-33.	
		LIN, Dong et al.; "Dynamics of Random Early Detection"; SIGCOMM '97; August 1997; pages 127-137.	
		KIM, Hyogon; "A Fair Marker"; Internet Draft; Internet Engineering Task Force; April 1999; pages 1-9; <draft-kim-fairmarker-diffserv-00.txt>.	

Examiner
SignatureDate
Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.